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THE UNIVERSITY OF ALBERTA

A STUDY OF RELIGIOUS CONCEPTS

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
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by

Steven Douglas Heeren

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ABSTRACT

This study set out to determine the meanings that Roman Catholics and Protestants attach to a selected list of religious concepts. The technique employed was the semantic differential, developed by Charles E. Osgood, which intends to measure the meanings of concepts.

The subjects were university students, living in residence, who had strong ties with their religion, as defined by regular church attendance. Groups representing the Roman Catholic and United Church traditions were given the semantic differential, on which to rate 15 religious concepts, of which five were considered especially important from the Catholic point of view, five important to the United Church, and five relevant to both religious outlooks. The subjects rated the 15 concepts on 12 scales, of which 4 tapped the evaluative dimension of meaning, 4 tapped the potency dimension, and 4, the activity dimension. The resultant data was then tabulated and analyzed.

The most important finding was that the Roman Catholic sample consistently rated the various concepts with greater intensity of meaning than did the United Church sample. Combined with this greater extremity of judgment was the greater homogeneity of judgment evinced by the Catholic group. More diversity was shown by the United Church sample.

The above mentioned extremity of judgment by Roman Catholics resulted in distinct and significant differences in

meanings of religious concepts between the two groups, with the Catholic sample judging the concepts higher in value, potency, and activity. Several concepts (CHURCH, MASS, and JESUS CHRIST) hold quite different meanings from group to group, while others (LOVE, FAITH, DEATH) demonstrated little or no differences.

The semantic differential was found to be very well suited to measuring meanings and differences in meaning of religious concepts, and Osgood's original formulations were substantiated. The evaluative dimension accounted for nearly half of the total variance in meaning, as was expected from Osgood's writings.

Some suggestions were made for further research and an appendix was added which contained a copy of the actual semantic differential administered to the subjects.

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INTRODUCTION

The author has engaged in many discussions and arguments concerning religion. The question which inevitably comes up in these conversations is, "What do you mean by God?" or "How do you define the Eternal?" or "What, to you, is the soul?" It was the subsequent confusion in terms, and semantic ambiguity which sparked my interest in this area--and is, ultimately, the source of this thesis. My cohorts and I never knew whether we were talking about the same term. And it was this pressure that tempted me to try to measure the meanings of religious concepts.

Since 1956 a technique for measuring meaning has been used with increasing frequency. In fact, the number of references to it found in Psychological Abstracts has been rising exponentially year by year since 1958. This measuring instrument, developed by Charles E. Osgood et al., (1957) is called the semantic differential.

What does Osgood mean by "meaning"? First, he is careful to state that he does not mean the denotative attributes of a concept. That is, when he attempts to measure the meaning of, for example, THUNDER, he is not measuring its denotative aspects or the referent of that concept, but instead claims to measure its connotative elements. He wants to be able to answer this question: What sort of response does this concept elicit from the subject? And his measuring technique, the semantic differential, is designed to find the

answer.

Although it is not necessary to go into Osgood's theory of behavior and learning (first outlined in his monumental Method and Theory in Experimental Psychology), it may be helpful to delineate briefly his ideas concerning "meaning" and its measurement.

To Osgood meaning is defined as a representational mediation process, or, in his code, $(r_m \rightarrow s_m)$. This $(r_m \rightarrow s_m)$ is a self-stimulating response, perhaps purely neural in nature, and is the process that takes place between the decoding and encoding behavior of a sign-using organism. $(r_m \rightarrow s_m)$ is, in Osgood's theory, a fractional part of the original response made to the significate or referent of a sign--an implicit response, as it were. It is the fundamental unit of language behavior and, hence, the purveyor of meaning in a sign-using organism.

In Osgood's words meaning is "that process or state in the behavior of a sign-using organism which is assumed to be a necessary consequence of the reception of sign-stimuli and a necessary antecedent for the production of sign-responses". (1957, p. 9)

Osgood et al. observe that the best index of meaning is linguistic encoding, ordinary intentional language. "After all, the basic function of language is supposed to be the communication of meaning--it is often defined as 'the expression of ideas'". (1957, p. 18) This implies that, if

we want to study meaning empirically, we must do it by studying language behavior.

Then, assuming, as Osgood does, that we need (a) a carefully devised sample of alternative verbal responses which can be standardized across Ss; (b) these alternatives to be elicited from Ss rather than emitted so that encoding fluency is eliminated as a variable; and (c) these alternatives to be representative of the major ways in which meanings vary, then some such format as the semantic differential is called for.

Osgood et al then go on to postulate a semantic space, "a region of some unknown dimensionality and Euclidian in character". (1957, p. 25) Each scale of polar opposites (e.g. good-bad) represents a straight line function that passes through the origin of this space and, if there are enough of them and they are representative, the dimensionality of the space will become exhausted and the space as a whole will be better defined.

With the techniques of factor analysis, three basic dimensions of the semantic space were discovered. These are the evaluative, the potency, and the activity dimensions or factors. They account for nearly half of the variance found when Ss are asked to fill out a semantic differential for common words. The remainder of the variance may either be encompassed in other, less easily mensurable or noticeable dimensions, or may actually be specific to the concept being

rated. But the fact remains that the three basic factors appear in all the factor analyses Osgood and his associates have done. These three dimensions are tapped by various scales which consistently load highly on their respective factors. For example, the scale, strong-weak, loads highly on the potency dimension.

As for the scales themselves, Osgood has found that a seven-point scale is most effective for maximum differentiation. For mathematical purposes, the scales are either numbered from plus 3 to minus 3 with 0 being a neutral rating, or from one to seven with 4 being equivalent to a neutral or middle rating. The latter approach was followed in this study.

What happens, then, when a S rates a concept on a particular scale? How is meaning measured? Within the established framework of the semantic space it can be seen that, when a person rates a concept, he allocates its meaning in terms of direction (as seen by the scale itself) and distance (depending on the extremeness of judgment on that scale) from the origin of the semantic space. Direction and distance of rating may easily be identified with the quality and intensity of meaning, respectively.

And when a S fills out several scales, representing all dimensions, he has then located that concept completely in the semantic space and that concept's meaning is thus measured. In concrete terms if the S gives, on a 7-point scale, a rating of, say, 6 on the good-bad scale, he has

indicated a quality of meaning for that concept, namely bad, and an intensity, namely, quite bad, all of which locates that concept at a particular point in the semantic space.

"By semantic differentiation, then, we mean the successive allocation of a concept to a point in the multidimensional semantic space by selection from among a set of given scaled semantic alternatives." (Osgood et al., p. 26)

But what sort of meaning is the semantic differential measuring? This is a big problem which has concerned Osgood. But he makes short work of it by admitting, "It is certain that we are not providing an index of what signs refer to". (1957, p. 325) In other words, it is not the denotative or referential aspects of a concept we are measuring, but most likely the connotative or emotive aspects of meaning, which are nevertheless important, being central variables in human behavior. It is obvious that, although for two persons the referent of the concept NEGRO is the same, we can expect them to respond differently towards a Negro, if, on one's semantic differential he rates NEGRO as bad, active, and strong, whereas the other rates NEGRO as equally bad, but also passive and weak.

"If we could get inside the speaker somehow and produce a particular $r_m \rightarrow s_m$ without any context, it is possible that he too would experience a kind of 'referenceless' 'denotationless' meaning, referable to some region of the semantic space but non-specific as to designation---

'something bad, strong, and active, but what I do not know.'" (Osgood et al., p. 324-5)

From this it is obvious that what is being measured is a necessary but not sufficient condition for delineating the total meaning of a concept. Indeed, only 50% of the total variance of meaning is accounted for. Some of the remainder, no doubt, is due to other untapped dimensions of meaning, and also to error variance or unreliability. In order to be sufficient, Osgood et al. feel it would be necessary to account for linguistic and situational factors which contribute to selective encoding and, hence, meaning.. And these factors, fortunately, are eliminated within the format of the semantic differential, wherein the concept is presented alone, outside the confines of linguistic components (as in a sentence), and equally outside situational determinants which make the concept's referent specific.

It is a very interesting philosophical question whether a concept has any meaning at all other than one's response to it, which the semantic differential attempts to measure. Imagine someone coming to the outskirts of a town and shouting, "Motion". As used, that concept would be meaningless, except for the responses it might elicit on a semantic differential, "Perhaps we should admit that the word 'meaning' is used in several senses; whether or not it is meaning that we are measuring, then, would seem to be a matter of choice of terms". (Osgood, et al., p. 325)

Let us turn now to the main purpose of this study. As mentioned before the idea arose out of the author's interest in religion and the many futile discussions and, hence, arguments he has participated in--futile because of the semantic confusion that pervaded such discussions. After awhile communication was at a low ebb, because none of the discussants knew what the others meant by some of the important words they used. For instance, in talking with Roman Catholics, the author could never tell just what was meant by the concept 'soul', a word not infrequently used by Roman Catholics. And when asked, the majority of them were not very specific as to what they meant by it. It is important to remember that religious terms are especially predisposed to this kind of problem, because the central concepts used in a discussion of religion are not usually open to observation. In other words, certain central religious concepts (GOD is a case in point) do not refer to things in the observable world. Instead they may refer to the supernatural or spiritual (both, by definition, unobservable), or to important relationships such as those implied in concepts like LOVE, FAITH, or PRAYER, still unobservable.

One of the unfortunate things about religious concepts is that they are so widely used by so many different types of people with varying levels of education, the result is virtual chaos when individuals with different viewpoints get together. There are many exceptions of course. It is

obvious that, the more frequently a word is used, the more meanings it acquires, unless its referent is quite specific. Witness the near meaninglessness of the term 'creativity', which is bandied about so often nowadays. Religious concepts are increasingly heir to this type of confusion because nearly everyone is interested in religion, one way or the other.

Another practical concern involves the relationship between the minister or priest and his congregation. I would suspect, with the coming of the "new theology" and the success of the recent Ecumenical Council of the Roman Catholic Church, that more and more ministers and priests, especially some of the younger ones, will be experiencing communication problems with respect to their churches. With the "new theology" concepts like GOD have undergone a change of meaning. How is the minister to implement these new ideas, unless he knows the meanings and framework out of which his parish views the world? In this respect, Paul Tillich's theology involves a new meaning of GOD, now defined as or equated to one's ultimate concern, and FAITH is the condition of being ultimately concerned. (Cf. his The Dynamics of Faith) And Karl Barth's central idea of the "Word of GOD" does not mean exactly what it used to in former times. In fact, for most people, the 'word of God' still probably refers to the Bible. How is one to change the meanings of these concepts to fit modern trends?

Fortunately that large problem is not the primary concern of this thesis.

All of this is not meant to imply that there has been no communication going on for the past centuries. There certainly has been. And, in all probability, the newer movements in theology are on the periphery of the major attempts being made within Christianity to examine, unify, and determine the meanings of the central doctrines. The existence of The Committee of Faith and Order of the World Council of Churches ably attests to the efforts being made on these problems.

The problem of the meanings of religious concepts occurs also in the realm of philosophical theology. Here the concern is to determine exactly what sort of concepts are meaningful, and then go on to outline one's system so that it is not contradictory. This inevitably involves the meanings of the important concepts, especially the concept GOD. The influence of logical positivism (and the verification principle, or, in theology, falsification principle) has ushered in new attempts to define and clarify the function of religious language. This, in fact, is still an unsolved problem, and the battle rages on, as it has for many centuries. (Cf. Flew and MacIntyre's volume, New Essays in Philosophical Theology)

All of these concerns sparked in the author the desire to find out, perhaps quantitatively, what is meant

by the various concepts entering into the several contexts-- concepts such as DEATH, GOD, SALVATION, FAITH, etc. It is only fair to say at this point that the author's desire in this direction was not exactly satisfied, since, as mentioned before, the semantic differential does not measure the referential meanings of concepts.

However, it was decided to make an exploratory study to uncover the type of information the semantic differential would yield when applied to religious concepts---to see, in fact, if it could handle such "vague" and "mysterious" concepts. There is nothing in the literature to indicate that anyone has tried to measure the meanings of religious concepts, or, furthermore, that anyone has even applied the semantic differential to them. Experimental psychologists generally eschew anything that smacks of metaphysics, religion, or "meanings". Osgood is the happy exception, as is O. Hobart Mowrer, although his approach is different.

Since the semantic differential is designed to measure meaning, and since science is dedicated to determining the differences that exist between the objects of its study, it was deemed fitting and appropriate to make a comparison between two representative religious groups. Because of their prominence in the Christian religion, it was decided to compare the meanings of religious concepts as between Roman

Catholics and Protestants, or, for this study, United Church¹ members. Just what differences do exist between these two groups in the meanings of various religious concepts as a result of the particular religious background peculiar to each?

No particular hypotheses will be tested here, although some could easily be conjured up if the need arises. In other words, the goal here is an exploratory one, with a view to answering the question: What's going on out there? The type of information we would like to get, therefore, is something like this: Is the concept FAITH viewed as strong or weak, good or bad? What does it mean to Roman Catholics as opposed to Protestants? Is it more valuable to either of the groups than, say, the concept GOD? Etc.

PROCEDURE

Since we desired to compare Roman Catholics with United Church members, it became imperative to select groups which would adequately represent these two religious traditions. It was decided that our samples should be regularly attending church-members, regular attendance defined as attending church at least once every two weeks.

¹Founded in 1925, it is a gathering together of Canadian Methodists, Congregationalists, and 3/4 of the Presbyterians of Canada. It may be typified as a "good middle class church". The United Church of Canada is equal, in terms of membership, to the Anglicans and Roman Catholics of Canada.

Since males appear to differ from females in religious outlook, the sex variable was controlled by limiting the samples to males only; also expediency entered into this decision. The samples were likewise restricted to individuals under 25 years of age, in order to control for age differences. With respect to intelligence differences the ACE scores of Ss who had signed their names to the questionnaire were obtained from the Student Counselling Services, and it was discovered that the average intelligence scores from each group, Roman Catholic and United Church, did not differ significantly. The t test yielded a t of 1.383 for 49 df.

Each of the samples was obtained from residences on campus which cater only to individuals of a particular religious cast. The Roman Catholic sample was obtained from St. Joseph's College, which houses only Roman Catholics. There was no easy way of obtaining a large enough United Church sample with definite formal affiliation as evidenced by Holy Baptism or actual joining of the Church, so the United Church sample was obtained from St. Stephens College, which houses predominantly United Church members, member here being defined as regular United Church attendance. In addition, on the questionnaire itself was a question relating specifically to religious denomination, so as to provide an extra check on the respondent's affiliation. If a S answered that he was, in fact, a non-United-Church-member (e.g. Presbyterian or Lutheran), his questionnaire was subsequently disregarded.

Similarly, Ss over 25 were excluded from the samples.

As related to the other variable to be controlled-- church attendance--the data was not used from those Ss who, on the basis of their answers to that specific question, did not attend at least once every two weeks.

Another problem concerned a difference in church attendance between the United Church and Roman Catholics samples. In the Roman Catholic group all attended once or more a week, but the United Church sample included Ss who went once a week but also some who attended once every two weeks. The problem here was to ensure that the United Church sample was homogeneous. How this was handled will be described when we come to the actual administration of the semantic differential.

The narrow restrictions on our sample left an N of 37 for the United Church sample and an N of 45 for Roman Catholics.

Since there is a wealth of religious concepts, it was necessary to restrict the field somewhat in order to make the concepts chosen more meaningful and manageable. The selection process was straightforward and entirely pertinent to the problem at hand. It consisted simply of approaching three individuals, priests or ministers (3 of each), in each of the two religious positions (Catholic and United), and asking them to submit a list of what, to them, are the most important religious concepts from their own point of view.

From the lists submitted a master list was compiled, based on frequency of choice, of the five most important concepts 1) to the Roman Catholic tradition; 2) to the United Church tradition; and 3) to both traditions taken as a whole. These last five concepts are fairly representative of the Christian religion as opposed to sects within it. And that list has great face validity, at least. All of this resulted in a total list of 15 concepts (5 plus 5 plus 5), which were subsequently used on the semantic differential. These concepts are:

<u>Roman Catholic</u>	<u>United Church</u>	<u>Both Traditions</u>
Blessed Virgin	Holy Spirit	Prayer
Hell	Eternal Life	Faith
Death	Love	Sin
Mass	God	Jesus Christ
Confession	Church	Communion

As can now be seen, the list itself has a good deal of face validity, for a quick inspection shows that the concepts falling under each category are easily associated with that tradition. As for the concepts applying to both traditions, it can be seen that these concepts are quite central to any (Christian) religious position.

One minor problem arose in trying to decide exactly in what order the 15 concepts should be placed on the semantic differential. For instance, if the first concept for the S to rate was MASS, he might not know exactly how to approach

it--it could refer to physics or religion. This was easily solved by embedding MASS far on into the questionnaire, thus ensuring that it was approached in a religious context. The same procedure was followed with such concepts as DEATH, LOVE, and HELL, none of them distinctly religious in flavor. Furthermore the concepts for each of the three categories (R.C., U.C., and Both) were randomly interspersed throughout the differential so as to prevent the formation of response sets.

The next important step was to select the scales to be used on the differential. A scale is simply a pair of bipolar, adjectival opposites, such as good-bad. There is a veritable wealth of usable scales (see Osgood et al., 1957), but to keep the differential both manageable and appropriate, a selection process was employed to root out the unessential scales. Two factors are relevant in the work of scale selection: First, as mentioned before, Osgood has discovered three central dimensions of meaning, which account for over 50% of the 'meaning' of any concept (Osgood et al., p. 38). His research has established the scales which are loaded highly on each of the three dimensions. So one must choose scales which will tap each of the important factors in meaning, but which, at the same time, are loaded highly only on one factor, to avoid confounding of factors. Some scales, e.g. brave-cowardly, load highly on both the evaluative and the potency dimensions.

Secondly, the scales chosen must be appropriate to the concepts being judged on the differential. For instance, even though the scale, fair-unfair, is highly loaded on the evaluative dimension, it is not very applicable to religious concepts, the concern of this study. Fair-unfair might be more appropriate to perhaps political concepts or persons.

With these two guidelines in mind, the following scales were chosen:

<u>Evaluative Dimension</u>	<u>Potency Dimension</u>	<u>Activity Dimension</u>
good-bad	small-large	inert-energetic
ugly-beautiful	potent-impotent	alive-dead
valuable-worthless	weak-strong	slow-fast
important-unimportant	masculine-feminine	active-passive

The reasons that four scales from each dimension were chosen are two: 1) to insure that each particular dimension is adequately tapped and represented; and 2) to make the differential itself more fitting to our needs in terms of size, appearance, etc.

When each of the scales were then put onto the differential, they were randomized in terms of the dimensions of meaning which they represented. Furthermore, care was taken to insure that the Ss didn't get into a response set of putting all their check-marks on one or the other side of the scales. This was done by reversing some of the scales with respect to which end of the scale fell on the left side of each differential page. For instance, the evaluative scales

were good-bad and valuable-worthless, but also ugly-beautiful and unimportant-important. The 'positive' end of the scales, as it were, occurred on both sides of the page to prevent set. The same was done for all scales representing each factor of meaning.

Besides the 12 (3 factors times 4 scales on each) scales used, the author included four additional ones¹ for personal interest and fittingness of the scales added. The data gathered from these scales were ignored for the purpose of this thesis because they did not fit easily into the conceptual schema surrounding the use of the semantic differential. They may, however, be used in a subsequent analysis of the data.

The same prepared order of both concepts and scales was kept constant for all Ss.

The instructions used on the semantic differential were the ones suggested by Osgood et al in The Measurement of Meaning, reworded in one or two places to fit local conditions. (See Appendix A). The set of scales was multilithed and the concepts typed at the top of each page.

The administration of the semantic differential was easier than anticipated. Each residence, in which the Ss were lodged, has a residence president. He was approached and asked if he would help distribute the differential to the

¹ These were human-divine, sacred-profane, holy-accursed, and mysterious-understandable.

Ss and collect them again when they were completed. In both residences the president agreed to help, and was given 50 copies of the SD to distribute and collect.

There were additional instructions given by the residence president as he handed them out. The Ss were told that they didn't have to put their names on the questionnaire if they wished not to. This was done with the realization that some people are sensitive about signing their names to opinions on controversial topics, especially when being asked to judge very important religious concepts.

The Ss filled out the SD individually, not in groups, and when finished, handed them back to the residence president.

Of the 50 semantic differentials given to Roman Catholic Ss, 5 were not returned. Since all of the Roman Catholic sample attended church regularly (i.e., twice a month or more often), indicated that their religious affiliation was, in fact, Roman Catholic, and, finally, that all were under 25 years of age, the result was an N of 45 for that group.

Such was not the case with the United Church sample. Of the 50 SD's distributed, all were returned, but, of those, one was eliminated because of age, one because of religious affiliation (Presbyterian), and eleven because their church-attendance did not reach our criterion of regularity, which is once every two weeks or more often. Thus we are left with an N of 37 for the United Church group.

However, of the 37, 25 had indicated weekly attendance, but 12 had indicated bi-weekly attendance. Although this met our original selection criterion, this category of attendance was not found among the Roman Catholic group, all of whom attended church (Mass) regularly each week, thus insuring homogeneity on that variable in their sample. We resolved the problem by showing that the United Church sample was homogeneous, despite the differences in church attendance between its two sub-groups. This was done by choosing, on the basis of a table of random numbers, thirty scales from the SD and comparing the two groups of 12 and 25 of these thirty scales. It was discovered, by the technique of Chi-square, that only two of the thirty scales demonstrated differences between the two sub-groups. This could have happened by chance alone, thus showing that the two groups came from the same United Church population, in terms of church attendance.

The data which was analyzed, therefore, came from these two groups,---one, Roman Catholic, with an N of 45, and the other, United Church, with an N of 37.

RESULTS

Table I presents the medians for each of the groups on each of the 15 concepts for the 12 scales. The grand median is also found indicating the rating of both groups taken as a whole. The resulting Chi-squares and probability

values for each comparison is also presented. When reading the table, keep in mind that the figures given are taken from a seven-point scale, with low medians, say, 1.034, indicating that the rating for that group fell near the left-hand side of the scale as it is given. A high median, say, 6.824, means that the group's rating was near the upper, or right-hand, edge of the scale. When the given median falls between 3.500 and 4.500, it means the group rated the concept as neutral on that scale. This is probably true even though some so-called neutral ratings resulted from the wide variance within a group as to how that concept should be rated. For instance, the median rating on the valuable-worthless scale for the concept SIN given by the United Church was 3.944, indicating a supposed neutral rating for that group. But in fact the 3.944 resulted from some of the sample rating SIN as quite valuable and a nearly equal number rating SIN as quite worthless. These diverse ratings balanced out to a 'neutral' median. It is nonetheless fair to say that United Church members, as a group, are neutral (or undecided?) as to the value or worthlessness of SIN!

The most noticeable thing about the data is that, when comparing the medians of the two groups, the Roman Catholics, almost invariably, made more extreme judgments in the direction of greater value, potency, and activity. This means that when they rated or judged a concept, they

TABLE I

MEDIAN SCALE RATINGS ON RELIGIOUS CONCEPTS

	R.C. Median	U.C. Median	Grand Median	X ²	p
			GOD		
<u>Scales:</u>					
<u>Evaluative:</u>					
valuable-worthless	1.049	1.138	1.086	2.645	N.S.
unimportant-important	6.951	6.922	6.938	.098	N.S.
good-bad	1.049	1.078	1.062	.098	N.S.
ugly-beautiful	6.797	5.650	6.524	15.789	.01
<u>Potency:</u>					
feminine-masculine	4.333	5.909	5.333	4.830	.05
strong-weak	1.108	1.341	1.195	5.209	.05
impotent-potent	6.750	6.619	6.696	.846	N.S.
small-large	5.857	5.950	5.912	.364	N.S.
<u>Activity:</u>					
slow-fast	4.103	4.286	4.173	3.201	N.S.
alive-dead	1.182	1.341	1.245	1.773	N.S.
inert-energetic	6.444	5.950	6.184	1.567	N.S.
active-passive	1.233	1.909	1.420	7.467	.01

TABLE I (cont.)-- MEDIAN SCALE RATINGS ON RELIGIOUS CONCEPTS

	R.C. Median	U.C. Median	Grand Median	X ²	p
<hr/>					
SIN					
<hr/>					
<u>Scales:</u>					
<u>Evaluative:</u>					
valuable-worthless	6.563	3.944	5.429	12.108	.01
unimportant-important	6.522	6.273	6.389	4.080	.05
good-bad	6.951	6.526	6.817	16.337	.01
ugly-beautiful	1.203	2.182	1.453	13.933	.01
 <u>Potency:</u>					
feminine-masculine	3.988	4.030	4.007	.520	N.S.
strong-weak	3.846	2.364	3.500	3.989	.05
impotent-potent	5.571	5.417	5.500	.049	N.S.
small-large	4.203	4.474	4.304	3.368	N.S.
 <u>Activity:</u>					
slow-fast	4.141	4.262	4.189	1.302	N.S.
alive-dead	3.844	1.850	2.625	9.521	.01
inert-energetic	4.348	5.550	4.750	4.178	.05
active-passive	2.188	1.950	2.056	.732	N.S.
 <hr/>					
PRAYER					
<hr/>					
<u>Evaluative:</u>					
valuable-worthless	1.143	1.536	1.274	7.525	.01
unimportant-important	6.875	6.619	6.781	5.177	.05
good-bad	1.108	1.271	1.172	3.203	N.S.
ugly-beautiful	6.231	5.450	5.891	4.304	.05
 <u>Potency:</u>					
feminine-masculine	3.961	3.953	3.957	.098	N.S.
strong-weak	1.365	1.955	1.588	3.756	N.S.
impotent-potent	6.208	6.000	6.109	.429	N.S.
small-large	4.015	4.111	4.057	.982	N.S.
 <u>Activity:</u>					
slow-fast	3.909	3.896	3.904	.223	N.S.
alive-dead	2.667	2.607	2.630	.004	N.S.
inert-energetic	5.036	5.167	5.075	.663	N.S.
active-passive	1.727	2.455	2.091	2.623	N.S.

TABLE I (cont.)-- MEDIAN SCALE RATINGS ON RELIGIOUS CONCEPTS

	R.C. Median	U.C. Median	Grand Median	X ²	p
<hr/>					
<u>Scales:</u>	<hr/>				
	<hr/>				
	CHURCH				
<hr/>					
<u>Evaluative:</u>					
valuable-worthless	1.162	1.425	1.259	4.183	.05
unimportant-important	6.892	6.526	6.768	8.941	.01
good-bad	1.063	1.381	1.172	10.989	.01
ugly-beautiful	6.522	5.542	6.000	9.079	.01
<hr/>					
<u>Potency:</u>					
feminine-masculine	3.987	3.931	3.963	.973	N.S.
strong-weak	1.365	2.542	1.923	19.319	.01
impotent-potent	6.400	5.500	5.982	8.100	.01
small-large	5.938	4.583	5.278	4.178	.05
<hr/>					
<u>Activity:</u>					
slow-fast	4.029	3.675	3.900	11.439	.01
alive-dead	1.500	2.025	1.828	6.932	.01
inert-energetic	6.364	5.444	5.833	4.304	.05
active-passive	1.438	2.455	1.891	8.584	.01
<hr/>					
	<hr/>				
	CONFESSION				
<hr/>					
<u>Evaluative:</u>					
valuable-worthless	1.064	2.625	1.310	29.524	.01
unimportant-important	6.963	5.333	6.736	32.794	.01
good-bad	1.095	2.139	1.420	34.410	.01
ugly-beautiful	6.056	4.229	4.933	18.320	.01
<hr/>					
<u>Potency:</u>					
feminine-masculine	3.976	3.956	3.967	.042	N.S.
strong-weak	1.500	3.350	2.417	16.831	.01
impotent-potent	6.620	4.850	5.861	18.320	.01
small-large	4.136	4.065	4.102	1.129	N.S.
<hr/>					
<u>Activity:</u>					
slow-fast	4.014-	4.000	4.008	.002	N.S.
alive-dead	2.700	3.438	3.154	.490	N.S.
inert-energetic	4.750	4.361	4.487	1.026	N.S.
active-passive	1.667	3.156	2.789	12.944	.01

TABLE I (cont.)-- MEDIAN SCALE RATINGS ON RELIGIOUS CONCEPTS

	R.C. Median	U.C. Median	Grand Median	X ²	p
<hr/>					
ETERNAL LIFE					
<hr/>					
<u>Scales:</u>					
<u>Evaluative:</u>					
valuable-worthless	1.063	2.313	1.288	27.878	.01
unimportant-important	6.951	6.231	6.768	23.989	.01
good-bad	1.108	1.875	1.304	17.004	.01
ugly-beautiful	6.667	6.063	6.524	3.075	N.S.
<u>Potency:</u>					
feminine-masculine	3.989	4.000	3.994	.031	N.S.
strong-weak	3.250	2.889	3.000	1.308	N.S.
impotent-potent	5.333	4.950	5.038	1.565	N.S.
small-large	4.365	4.474	4.411	.336	N.S.
<u>Activity:</u>					
slow-fast	3.922	4.000	3.958	.606	N.S.
alive-dead	1.333	2.563	1.500	3.989	.05
inert-energetic	4.386	4.571	4.443	.387	N.S.
active-passive	3.000	3.150	3.115	.307	N.S.
<hr/>					
MASS					
<hr/>					
<u>Evaluative:</u>					
valuable-worthless	1.081	3.600	1.488	47.357	.01
unimportant-important	6.934	4.500	6.537	50.225	.01
good-bad	1.038	3.100	1.451	59.231	.01
ugly-beautiful	6.848	4.600	6.091	40.247	.01
<u>Potency:</u>					
feminine-masculine	4.013	4.000	4.007	.109	N.S.
strong-weak	1.296	3.813	2.750	24.172	.01
impotent-potent	6.673	4.583	5.368	19.926	.01
small-large	4.132	4.063	4.098	1.369	N.S.
<u>Activity:</u>					
slow-fast	4.029	3.875	3.966	4.936	.05
alive-dead	1.477	3.583	2.588	26.196	.01
inert-energetic	5.800	4.313	4.750	4.905	.05
active-passive	1.396	3.600	2.467	21.367	.01

TABLE I (cont.)-- MEDIAN SCALE RATINGS ON RELIGIOUS CONCEPTS

	R.C. Median	U.C. Median	Grand Median	χ^2	p
<u>Scales:</u>					
<u>HOLY SPIRIT</u>					
<u>Evaluative:</u>					
valuable-worthless	1.276	1.650	1.391	2.827	N.S.
unimportant-important	6.908	6.455	6.768	12.021	.01
good-bad	1.077	1.304	1.161	6.624	.05
ugly-beautiful	6.667	5.889	6.438	5.027	.05
<u>Potency:</u>					
feminine-masculine	4.182	4.146	4.167	.001	N.S.
strong-weak	1.143	1.556	1.274	7.525	.01
impotent-potent	6.797	6.313	6.663	5.348	.05
small-large	4.333	5.083	4.476	3.075	N.S.
<u>Activity:</u>					
slow-fast	4.029	4.286	4.125	6.624	.05
alive-dead	1.226	1.571	1.337	3.459	N.S.
inert-energetic	6.696	6.111	6.547	3.823	N.S.
active-passive	1.226	1.778	1.372	5.464	.05
<u>HELL</u>					
<u>Evaluative:</u>					
valuable-worthless	4.750	3.438	3.868	2.718	N.S.
unimportant-important	6.313	5.563	5.938	1.436	N.S.
good-bad	6.797	5.600	6.609	9.138	.01
ugly-beautiful	1.077	2.000	1.274	21.159	.01
<u>Potency:</u>					
feminine-masculine	4.012	4.212	4.088	9.715	.01
strong-weak	3.536	2.583	3.045	2.099	N.S.
impotent-potent	5.000	5.429	5.231	.243	N.S.
small-large	4.476	5.083	4.833	.916	N.S.
<u>Activity:</u>					
slow-fast	3.939	4.229	4.061	7.165	.01
alive-dead	3.000	2.800	2.875	.004	N.S.
inert-energetic	4.917	4.464	4.750	.387	N.S.
active-passive	2.556	2.563	2.559	.000	N.S.

TABLE I (cont.)-- MEDIAN SCALE RATINGS ON RELIGIOUS CONCEPTS

	R.C. Median	U.C. Median	Grand Median	X ²	p
<hr/>					
FAITH					
<hr/>					
<u>Scales:</u>					
<u>Evaluative:</u>					
valuable-worthless	1.063	1.078	1.069	.000	N.S.
unimportant-important	6.938	6.862	6.906	1.675	N.S.
good-bad	1.077	1.161	1.112	1.639	N.S.
ugly-beautiful	6.458	6.000	6.204	3.099	N.S.
<u>Potency:</u>					
feminine-masculine	3.989	3.897	3.952	4.672	.05
strong-weak	1.333	1.607	1.432	1.609	N.S.
impotent-potent	6.724	6.222	6.589	3.677	N.S.
small-large	4.478	5.000	4.700	.916	N.S.
<u>Activity:</u>					
slow-fast	3.893	3.882	3.889	.543	N.S.
alive-dead	1.365	1.923	1.587	4.178	.05
inert-energetic	6.543	6.000	6.235	2.365	N.S.
active-passive	1.400	1.958	1.667	3.411	N.S.
<hr/>					
BLESSED VIRGIN					
<hr/>					
<u>Evaluative:</u>					
valuable-worthless	1.092	3.546	1.583	50.777	.01
unimportant-important	6.951	4.818	6.609	49.669	.01
good-bad	1.023	2.458	1.320	50.110	.01
ugly-beautiful	6.923	5.692	6.628	35.129	.01
<u>Potency:</u>					
feminine-masculine	1.063	1.185	1.112	3.438	N.S.
strong-weak	1.125	3.882	1.955	52.740	.01
impotent-potent	6.696	4.179	5.813	23.152	.01
small-large	4.152	3.942	4.059	2.528	N.S.
<u>Activity:</u>					
slow-fast	4.092	3.926	4.023	.469	N.S.
alive-dead	1.162	3.956	1.500	26.053	.01
inert-energetic	6.724	4.308	5.643	30.362	.01
active-passive	1.276	3.769	2.417	38.359	.01

TABLE I (cont.)-- MEDIAN SCALE RATINGS ON RELIGIOUS CONCEPTS

	R.C. Median	U.C. Median	Grand Median	X ²	p
<hr/>					
DEATH					
<hr/>					
<u>Scales:</u>					
<u>Evaluative:</u>					
valuable-worthless	2.889	2.455	2.750	.678	N.S.
unimportant-important	6.724	6.273	6.589	3.677	N.S.
good-bad	3.350	3.429	3.382	.032	N.S.
ugly-beautiful	3.964	4.077	4.019	.030	N.S.
<u>Potency:</u>					
feminine-masculine	4.011	4.044	4.026	.520	N.S.
strong-weak	3.575	2.500	2.900	.619	N.S.
impotent-potent	5.643	5.650	5.647	.026	N.S.
small-large	4.100	4.240	4.158	2.189	N.S.
<u>Activity:</u>					
slow-fast	4.217	4.250	4.232	.045	N.S.
alive-dead	4.357	4.063	4.250	.199	N.S.
inert-energetic	4.048	4.458	4.197	3.368	N.S.
active-passive	3.615	3.000	3.357	1.335	N.S.
<hr/>					
JESUS CHRIST					
<hr/>					
<u>Evaluative:</u>					
valuable-worthless	1.023	1.138	1.069	4.112	.05
unimportant-important	6.964	6.839	6.914	5.081	.05
good-bad	1.037	1.161	1.086	5.081	.05
ugly-beautiful	6.750	6.179	6.568	6.778	.01
<u>Potency:</u>					
feminine-masculine	6.818	6.619	6.741	2.487	N.S.
strong-weak	1.049	1.304	1.141	9.939	.01
impotent-potent	6.892	6.619	6.793	6.359	.05
small-large	4.365	4.472	4.409	.336	N.S.
<u>Activity:</u>					
slow-fast	4.108	4.361	4.191	6.359	.05
alive-dead	1.125	1.857	1.288	11.813	.01
inert-energetic	6.875	6.444	6.741	8.887	.01
active-passive	1.108	1.304	1.183	4.156	.05

TABLE I (cont.)-- MEDIAN SCALE RATINGS ON RELIGIOUS CONCEPTS

	R.C. Median	U.C. Median	Grand Median	χ^2	p
<hr/>					
<u>Scales:</u>			LOVE		
<hr/>					
<u>Evaluative:</u>					
valuable-worthless	1.125	1.097	1.112	.202	N.S.
unimportant-important	6.876	6.815	6.849	.566	N.S.
good-bad	1.143	1.341	1.223	3.216	N.S.
ugly-beautiful	6.750	6.862	6.805	1.382	N.S.
<u>Potency:</u>					
feminine-masculine	3.903	3.883	3.894	.017	N.S.
strong-weak	1.304	1.341	1.320	.065	N.S.
impotent-potent	6.600	6.575	6.589	.018	N.S.
small-large	4.365	6.000	4.833	5.253	.05
<u>Activity:</u>					
slow-fast	4.080	4.250	4.141	1.773	N.S.
alive-dead	1.400	1.185	1.288	2.660	N.S.
inert-energetic	6.221	6.067	6.190	1.232	N.S.
active-passive	1.600	1.538	1.571	.032	N.S.
<hr/>					
			COMMUNION		
<hr/>					
<u>Evaluative:</u>					
valuable-worthless	1.063	1.875	1.259	23.553	.01
unimportant-important	6.964	6.154	6.768	28.888	.01
good-bad	1.023	1.545	1.172	23.428	.01
ugly-beautiful	6.818	5.765	6.420	26.571	.01
<u>Potency:</u>					
feminine-masculine	4.023	3.970	4.000	.032	N.S.
strong-weak	1.276	3.143	1.967	21.695	.01
impotent-potent	6.724	5.350	6.029	24.287	.01
small-large	4.172	4.173	4.172	.022	N.S.
<u>Activity:</u>					
slow-fast	4.054	3.926	4.000	.158	N.S.
alive-dead	1.667	2.750	2.423	.750	N.S.
inert-energetic	5.750	4.467	5.033	5.786	.05
active-passive	1.813	2.958	2.500	5.959	.05

consistently did so with a greater intensity of judgment. This doesn't tell us the quality of their ratings, however. That can be found by inspection of Table I itself.

Since there were 15 concepts to be rated on 12 scales, there were 180 comparisons made between the two samples. Of the 180, the Roman Catholics' group judgments were the more extreme in 126 of the cases. This seems at variance with the previous statement above that they did so "almost invariably." Perhaps that statement should be qualified by adding that the Roman Catholics made the more extreme ratings when more extreme judgments were called for. That is, when each sample felt it should make a judgment other than a neutral one, they made it, with the Roman Catholics consistently making the more extreme ones. What caused many of the neutral or "4" ratings was, in fact, the irrelevance of the scale to the concept, for instance, HELL is neither feminine nor masculine. And closer inspection reveals that, of the 54 scales on which the United Church group was more extreme, 30 of those 54 were on scales which registered neutral ratings for both groups as a whole. (See Table I). Of the 126 scales on which Roman Catholics were more intense, only 9 fell on scales which both groups rated as neutral. So it is obvious that the Roman Catholics were generally more extreme, 117 (126 minus 9) as opposed to 24 (54 minus 30) for the United Church sample. What this means will be taken up in the discussion.

To determine what actual differences do exist between the groups, the data was analyzed by means of median tests, which involve directly the use of Chi-square. This non-parametric test was used because the author did not want to make the dubious assumption of equal intervals between the scale rating positions, this assumption being required if the t test was employed. On top of that, a comparison of medians rather than means is recommended by Osgood et al on other grounds, although left unmentioned by them. (1957, p. 87).

On the basis of the median tests, it was found that, of 180 comparisons, 87 of them were statistically significant at the 5% level or beyond. On the basis of chance alone we would expect only 5% of 180, or 9 of the comparisons to be significant, if the two groups came from the same population. Since 87 of the 180 Chi-squares were significant, of itself this indicates a highly significant difference. There is little doubt that the two groups of ratings represent different populations.

Since we have now determined that large differences in meaning do exist for our two samples, we shall concern ourselves henceforth with those differences, that is, with the obtained 87 differences. After all, we were initially concerned in the variances to be found between the two S groups, and, once they were found, we can determine in what meaningful ways, if any, these differences distribute themselves. In other words, the differences that do, in fact, exist between

Roman Catholics and United Church members are encompassed in those 87 scales, which, of course, represent the three main dimensions of meaning.

Of the 87 significant differences, 40 of them were found in the evaluative dimension of meaning, 21 in the potency dimension, and 26 in the activity dimension. Since one might expect an equal distribution of the differences (87) among the three dimensions, a Chi-square was performed to test this hypothesis. Not only is it obvious from inspection, but the obtained X^2 was 6.69 (df of 2, $p < .05$), which shows that our obtained differences did not arrange themselves equally among the three factors of meaning. This, of course, is in accordance with Osgood's finding that the evaluative dimension accounts for the greatest proportion of variance in meaning that is found.

Do some of the concepts, rather than others, account for more of the total difference in meaning that has been found between our samples, and as represented by the 87 differences? With 15 concepts in the study, and 87 differences found, one would hypothesize that each concept would account for approximately 5.8 of the differences. A Chi-square performed to test this showed that, in fact, some of the concepts do account for a greater proportion of the observed differences in meaning. $X^2 = 29.38$, significant at the 1% level with 14 df.

Since it was included in the original plan to study

concepts representing each S group, and also those concepts which were derived from both traditions, we should like to know how Roman Catholics differed from United Church members in viewing the concepts relative to the other and those relevant to both. That is, if there are differences between our groups in rating the three categories of concepts (Roman Catholic concepts, United Church concepts, and concepts pertaining to both), where do the differences fall? By simple inspection of the arrangement of the 87 differences, it was found, interestingly enough, that they fell like this: 30 of the 87 differences in meaning were discovered on the Roman Catholic concepts, 27 of them on the United Church concepts, and the final 30 on those concepts which are held to be important by both religious positions. In other words, the obtained differences (87) distributed themselves evenly among the three categories of concepts. This means that, taken as a whole, each category of concepts did not differ in meaning from either of the other categories as seen by the two groups.

Of course, within each category there were considerable individual differences with respect to which of the concepts accounted for the sum differences of that category. But even these distributed themselves in interesting ways, perhaps meaningless nonetheless. Table II will demonstrate what is meant.

The distributions in Table II demonstrate that, even

TABLE 2

DISTRIBUTION OF SIGNIFICANT DIFFERENCES BY
CONCEPT AMONG 3 CATEGORIES

CATEGORIES					
ROMAN CATHOLIC		UNITED CHURCH		BOTH	
Concept	no. of scale dif- ferences	Concept	no. of scale dif- ferences	Concept	no. of scale dif- ferences
MASS	10	CHURCH	11	JESUS CHRIST	10
BLESSED VIRGIN	9	HOLY SPIRIT	7	COMMUNION	8
CONFESSION	7	ETERNAL LIFE	4	SIN	7
HELL	4	GOD	4	PRAYER	3
DEATH	0	LOVE	1	FAITH	2
	<u>30</u>		<u>27</u>		<u>30 = 87</u>

TABLE 3

DISTRIBUTION OF SIGNIFICANT DIFFERENCES BY
SCALE AMONG 3 DIMENSIONS

SCALE	No. of differences Accounted For
<u>Evaluative:</u>	
valuable-worthless	9
unimportant-important	10
good-bad	10
ugly-beautiful	11
	<u>40</u>
<u>Potency:</u>	
feminine-masculine	3
strong-weak	9
impotent-potent	7
small-large	2
	<u>21</u>
<u>Activity:</u>	
slow-fast	5
alive-dead	7
inert-energetic	6
active-passive	8
	<u>26</u>

among the categories, each category can account for its proportionate share of those concepts which show large differences in meaning between samples, and those concepts which display little difference in meaning. For instance, each category contained one of the three concepts whose meaning differed greatly between groups (10 and 11 of 12 scales showed reliable differences), and each category had within it one of those concepts which showed little difference in meaning (0, 1, and 2 only of 12 scales differed). This trend was present throughout.

It will be remembered that, of the total 87 scale differences, 40 were in the evaluative dimension, 21 in potency, and 26 in activity. Now, within each dimension, was there any one scale which alone was accounting for the differences, or, were each of the scales doing their job of noting differences? Table III presents the findings on this question.

It is obvious from inspection that, within each dimension, each of the four scales tapped its approximate share of the total number of differences which its respective dimension contained. E.g. of the 40 evaluative differences, you would expect each of the four evaluative scales to account for $1/4$ of the forty, which in fact they did with high approximation. On the potency dimension, a Chi-square was done, resulting in a $X^2 = 7.190$, which was not significant at the 5% level for 3 df, and which shows that distribution could have happened by chance alone. Even so, it is obvious that the strong-weak and

impotent-potent scales did most in accounting for differences in the potency dimension.

Before discussing the concepts themselves, it should be mentioned that, of the 87 discovered differences, the Roman Catholic judgment was the more extreme, in terms of greater valuation, potency, and activity, in 75 of the cases. This confirms our earlier statement concerning the greater intensity with which Roman Catholics make their ratings of the various concepts. Hypothesizing that, of the 87, at least half of the more extreme judgments would fall to each group, it is obvious that 75 of them falling to the Roman Catholics is quite highly significant.

Returning to Table II for an examination of the data on the individual concepts to learn which differ greatly, moderately, or not at all, between samples, we discover that the CHURCH has the greatest difference in meaning, as measured by the sum total of scale differences, which in this case is 11. We can safely say that CHURCH differs very much in meaning between Roman Catholics and United Church members, and the differences are in all three dimensions of meaning, with the Catholics rating CHURCH higher in valuation, higher in potency, and higher in activity.

The same is true for MASS, except that there are only 10 scales out of 12 which register differences between Catholics and Protestants. Still, as expected, MASS, is greatly different in meaning from group to group.

And so on, through the list of concepts, until we get to the concepts which showed little or no difference in meaning. DEATH showed no significant differences, and LOVE and FAITH demonstrated very few (1 and 2 respectively).

There is no need to discuss all the concepts in such detail, as the interested reader can, using Table II first to find the concepts that differ and to what degree, and then Table I to determine exactly on what scales and dimensions these differences are found, do this for himself.

Also the reader can, if he wishes, make a detailed examination of Table I to determine just what each concept means to each group in terms of the three basic dimensions of meaning. This is done by inspecting the median scores obtained by each group on each scale for each concept. Thus, we see that on the concept GOD, United Church members' median on the ugly-beautiful scale is 5.650, which is a quite high evaluative rating. And so forth.

These data may provide comparison figures for further investigations using other groups, or Ss at different times, to learn if meanings have changed.

DISCUSSION

The most striking result was the finding that Roman Catholics, time and time again, make their judgments with greater intensity than the United Church group. This was not unexpected, of course, for it is common knowledge that they hold their beliefs with greater intensity than most other religious denominations. If it is, indeed, safe to equate extremity of judgment with dogmatism, then our findings concur with other studies, in which Roman Catholics score higher on such things as Rokeach's Dogmatism Scale. (Cf. his The Open and Closed Mind)

However there is at present no evidence to indicate that extremity of judgment is so related. Intensity of meaning may signify something entirely different, or there may be no relation at all between the meaning of concepts and the dogmatism of the persons holding those meanings. This needs to be studied further.

Inseparably tied up to the Roman Catholics' disposition to make the more extreme judgments is the obvious greater homogeneity found with respect to their responses. They seemed quite definitely more disposed to bunch their responses in the scale position which represented their rating, as if they had made a group decision to respond in such and such a scale rating, although certainly no such thing really took place. The United Church, conversely, showed greater heterogeneity of judgment, although certain judgments saw bunching of

responses, on certain scales for certain concepts. As evidence of this, we notice that out of 54 scales on which the United Church members made the more extreme choice, 30 of that 54 occurred on scales whose overall rating was neutral on the concept being judged. What caused the United Church sample to be more extreme was the presence in that sample of some few individuals who rated the concept slightly differently from the rest of their group, whereas this did not happen as often with the Roman Catholic group. It was these few deviants who caused their United Church group to end up with a more extreme median score. The similar presence of such deviant ratings in the Roman Catholic sample would no doubt have reinstituted their tendency to make the extreme judgment.

When we speak of the 'meaning' of a concept in this study, we are not talking of the referent of that concept. Instead, our concept of meaning, that is, a representational mediation process, is one which, as Osgood points out, may be a necessary but not sufficient condition to delineate completely the real meaning of a concept. So that, when we say that a concept, e.g. THUNDER, differs in meaning from one person to another, we are not saying that its referent is different, but rather that the response made to that referent is different, and furthermore, differs along certain dimensions. In our example, THUNDER, one person, a city-dweller, may see it as bad, passive, and weak, whereas a farmer may

see it as good, active, and strong, although they are both referring to the same external reality. Obviously THUNDER means something different from one to the other.

It is likewise clear from the data presented that this selection of religious concepts holds different meaning for our two samples. Taken as a whole, these concepts are seen differently by each group. What this means, of course, is that the religious tradition in which a person is raised will, to a great extent, determine what the central concepts mean to him. One result of this study has been to confirm this conclusion. Evidence has been brought forward to show that differences in meanings of religious concepts reflect differences in religious training.

But, as was noted in the results, these total differences in meaning can be broken down into more distinct parts to enable us to see just where the majority of them fall. Thus, we see that three concepts alone, CHURCH, MASS, and JESUS CHRIST, account for at least a third ($\frac{31}{87}$) of the total differences. And three others, DEATH, LOVE, and FAITH, taken together, account for only one-thirtieth ($\frac{3}{87}$) of that difference.

What this means is that certain concepts (CHURCH, MASS, and JESUS CHRIST) mean different things for Roman Catholics than they do for an equivalent group of United Church members. To the Roman Catholics, these three concepts are more valuable, active, and potent. On the other hand, certain other concepts

mean about the same thing to both samples. Here we find DEATH, LOVE, and FAITH. There is no difference in the meaning of DEATH (none of the 12 scales showed differences), and LOVE and FAITH possibly differ only in potency and activity. Certainly there is not enough evidence to claim that they differentiate significantly between groups.

It is interesting to note that those concepts which demonstrated little or no difference in meaning tend to be more 'existential' in nature than those showing large differences. Death, love, and faith, are certainly more ineffable (or mysterious?) in that their referents are not so exact as those concepts which have definite empirical referents (Mass, Church, and Jesus Christ) and which account for much more of the total variance. It is probably easier to assess the meaning of a concept if one knows exactly what it is to which that concept refers. Death, love, and faith do not fall in this class of concepts. Instead they are more apt to have a personal, inexpressible element about them.

Another important result of our study was to verify the findings of Osgood et al concerning the dimensions of meanings which account for the major variance that is found in the measurement of meaning. Their findings indicate that the major dimension of meaning is the evaluative one, which accounts for the most variance. Ours corroborate Osgood's in that the evaluative dimension accounted for 40 of the 87 differences in meaning. In other words, of the total

variance of meaning between Roman Catholics and United Church members, a little less than half of that total was in the way in which they evaluated the concepts.

One-fourth of the total variance was found in the potency dimension, 21 out of 87 scale differences being on potency scales. This is just half of the number in the evaluative factor. "The second dimension of the semantic space to appear is usually the potency factor, and this typically accounts for approximately half as much variance as the first factor...", (Osgood et al, p. 72)

The activity dimension accounts for the remainder of the total variance, 26 out of 87 differences. This, too, is in agreement with Osgood's findings, that the potency and the activity factors are about equal in accounting for total variance. 21 and 26 do not differ significantly, $\chi^2 = .532$ for 1 df., with the expected, of course, being half of their total of 47, or 23.5.

The selected 15 religious concepts were comprised out of three categories of concepts, one, Roman Catholic, contained concepts held to be important from their outlook; one, United Church, likewise, and, finally, one category having concepts central to both traditions. Although it would be guessed that each group would view "its" concepts differently from the way it viewed the other concepts, this did not happen. In terms of the number of differences which each category accounted for, one would not be able to differentiate

among the categories. Even the category containing concepts pertaining to both groups, although we would expect both samples to view them in the same way (and hence no difference), even that category had its fair share (30) of the total variance.

One may conclude that you can't, by dividing religious concepts into these three categories, expect them to show differences between Roman Catholics and United Church members. There are not reliable differences in meaning for each of the three categories as between samples.

What this probably indicates is either that type of religious concept is not able to differentiate groups (in which case the conclusion is that central religious concepts are not totally group-specific), or it indicates that our selection procedure for these concepts needs tightening up. A further study might attempt such a procedure. The author suggests that a content analysis (or concept analysis) be done on the writings of the religious sample to be studied to determine its important and recurring concepts. Or perhaps the present approach, with more specific directions given to the respondees (ministers and priests), asking for concepts that apply only to their particular tradition, could be used.

One lesson to be learned from this study is that not so many scales are needed to adequately tap the three factors of meaning. Although we found that each scale did its fair share of tapping the differences to be found in its dimension,

it was equally obvious that some of the scales did not really give us that much information. For instance, feminine-masculine turned out to be fairly useless in detecting differences and getting information, i.e. the vast majority of ratings on it were in the 4 or neutral position. This indicated that the Ss felt it to be irrelevant to the concept being rated. Furthermore, strong-weak and impotent-potent did most of the job of tapping the potency dimension, although not significantly more, as noted above.

The same held true for the scales slow-fast and small-large. Many neutral judgments were given on these scales, indicating their irrelevance to religious concepts. Besides, their respective dimensions were adequately tapped by other scales in that dimension. To conclude this portion, let it be said that Osgood himself has found that eight scales are usually adequate to tap or represent the major factors of meaning.

It might be mentioned at this point that the scales inserted for personal interest by the author made interesting reading, although not used for the data analysis. Two of them, holy-accursed and sacred-profane, are, in all probability, evaluative scales. In fact, Osgood shows that sacred-profane loads highly on that factor. The interesting thing about all four of the added scales is that they elicited meaningful responses from the Ss. Very few neutral ratings were made. And evidence has just been given that the understandable-

mysterious scale may be tapping another dimension of importance in meaningful judgments (Cf. Munnally, Jum C., 1961, p. 43)

In summary, the study indicates that there are important differences in meaning between Roman Catholics and United Church members on this selected list of religious concepts. Furthermore, these differences in meaning are mainly found in the way in which each group evaluates the concepts, the Catholics generally placing greater value on the concepts, that is, more extreme on the several evaluative scales. Of course, we found differences along the potency and activity dimensions also, with the Catholics again making the more extreme judgments.

SUMMARY AND CONCLUSIONS

The meaning of religious concepts was studied by administering a semantic differential to two groups of subjects, one Roman Catholic and the other United Church members. Since the semantic differential does not attempt to measure the referent of concepts, it was decided to test for differences between samples on the connotative meaning of a selected list of religious concepts. The differential was put together, with appropriate scales, and given to Roman Catholics and United Church members. The numbers of Ss per group were 45 and 37 respectively. The data were tabulated and analyzed and the following conclusions can be drawn:

1. Significant differences were found between Roman Catholics and United Church members in the meaning they assign to all but one of a selected list of religious concepts.
2. The ratings made by the Roman Catholic sample are made with greater intensity, or extremity, than those made by United Church members. This is true not only on those scales which registered differences, but also on those which showed no reliable inter-group differences.
3. The main dimension of meaning along which the greatest amount of variance was found is the evaluative dimension. Roman Catholics generally valued the concepts higher than did the United Church members.
4. Whether a concept was more related to one or the other church did not result in a difference in evaluation by

the two groups. Instead the total variance was distributed more with relation to concept than with relation to category of concept.

5. Some concepts (CHURCH, JESUS CHRIST, and MASS) accounted for an extreme amount of the total variance, while others (DEATH, LOVE, and FAITH) demonstrated little or no difference between samples.
6. The Roman Catholic sample demonstrated greater homogeneity in terms of scale ratings than did the United Church sample. The United Church group consistently showed greater intra-group differences in rating religious concepts.
7. The semantic differential has turned out to be a very useful instrument for measuring the differences in meaning of religious concepts as they exist between Roman Catholics and United Church members.

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APPENDIX "A"

Instructions

The purpose of this study is to measure the meanings of religious concepts as seen by various people. This is done by having the person judge the concepts against a series of descriptive scales. In taking this test, please make your judgments on the basis of what these things mean to you. On each page of this booklet you will find a different concept to be judged and beneath it a set of scales. You are to rate the concept on each of these scales in order.

Here is how you are to use these scales:

If you feel that the concept above the set of scales is very closely related to one end of the scale, you should place your check mark as follows:

fair x : : : : : : : unfair

or

fair : : : : : : : x unfair

If you feel that the concept is quite closely related to one or the other end of the scale (but not extremely), you should place your check-mark as follows:

strong : x : : : : : : : weak

or

strong : : : : : : : x weak

If the concept seems only slightly related to one side as opposed to the other side (but is not really neutral), then you should check as follows:

active : : : x : : : : : : : passive

or

active : : : : : : : x passive

The direction toward which you check, of course, depends upon which of the two ends of the scale seems most characteristic of the thing you're judging.

If you consider the concept to be neutral on the scale, both sides of scale equally associated with the concept; or if the scale is completely irrelevant, unrelated to the concept, then you should place your check-mark in the middle space:

safe : : : : x : : : : : dangerous

(cont'd)

Instructions (cont'd)

IMPORTANT: (1) Place your check-marks in the middle of spaces, not on the boundaries:

this not this
 : : : : : :
 : : : : : :

- (2) Be sure you check every scale for every concept--do not omit any.
- (3) Never put more than one check-mark on a single scale.

Sometimes you may feel as though you've had the same item before on the test. This will not be the case, so do not look back and forth through the items.

Do not try to remember how you checked similar items earlier in the test. Make each item a separate and independent judgment.

Work at fairly high speed through the test. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the items, that we want. On the other hand, please do not be careless, because we want your true impressions.

Before you begin, fill in the brief questionnaire below. When you have finished rating all the concepts, turn the booklet in.

QUESTIONNAIRE

Name	Age	Year in University
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Religious denomination

How often do you generally attend church?

 Once or more a week

 Once every two weeks

 Once every month

 Only occasionally

slow _____ : _____ : _____ : _____ : _____ : _____ : _____ fast

valuable _____ : _____ : _____ : _____ : _____ : _____ : _____ worthless

human _____ : _____ : _____ : _____ : _____ : _____ : _____ divine

feminine _____ : _____ : _____ : _____ : _____ : _____ : _____ masculine

alive _____ : _____ : _____ : _____ : _____ : _____ : _____ dead

accursed _____ : _____ : _____ : _____ : _____ : _____ : _____ holy

unimportant _____ : _____ : _____ : _____ : _____ : _____ : _____ important

strong _____ : _____ : _____ : _____ : _____ : _____ : _____ weak

sacred _____ : _____ : _____ : _____ : _____ : _____ : _____ profane

inert _____ : _____ : _____ : _____ : _____ : _____ : _____ energetic

good _____ : _____ : _____ : _____ : _____ : _____ : _____ bad

impotent _____ : _____ : _____ : _____ : _____ : _____ : _____ potent

active _____ : _____ : _____ : _____ : _____ : _____ : _____ passive

mysterious _____ : _____ : _____ : _____ : _____ : _____ : _____ understandable

ugly _____ : _____ : _____ : _____ : _____ : _____ : _____ beautiful

small _____ : _____ : _____ : _____ : _____ : _____ : _____ large

The other concepts in the order used in this study were: PRAYER, SIN, CHURCH, CONFESSION, ETERNAL LIFE, MASS, HOLY SPIRIT, HELL, FAITH, BLESSED VIRGIN, DEATH, JESUS CHRIST, LOVE, COMMUNION.

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